

EPA, REGION 7



Herculaneum Lead Smelter Site

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Sinter Plant

Blast Furnace

Main Office





Slag Pile

6/11/2002 09:05





504 Mississippi

5/17/2002 11:56

Current Actions at Site

- Surface soil replacement
- Cleaning home interiors to meet HUD standards
- Provide HEPA vacuums to residents
- Improve smelter operations/reduce emissions

Current Actions at Site

- Cleaning streets and haul routes
- Community outreach/Health education
- Monitoring for recontamination
- Voluntary Buyout within 3/8 mile of facility (MDNR)

Site Progress

- 167 yards have had soils replaced
- 83 home interiors cleaned
- All residences with children under 6 years of age cleaned
- All residences where lead contamination above 2500 ppm cleaned

Site Progress

- 97 HEPA vacuums provided by EPA
- 908 yards sampled; 616 yards have all or partial lead contamination above 400 ppm
- Operational improvement at smelter





Slag Pile

6/11/2002 09:40

Sampling

- Ambient air monitoring
- Soil sampling
- Street sampling – concentration and loading
- Interior dust – concentration and loading
- Deposition sampling – soil pots and adhesive paper



Home Interior Status

- Home interiors are being cleaned to meet HUD standards.
- EPA conducting re-sampling of previously cleaned home interiors
- Focus group formed to develop site-specific interior cleanup protocols and standards

Focus Group Status

- Lead dust experts provided preliminary recommendations for site on 12/19/02
- Preliminary recommendations include reducing the HUD standards by 50% and modifying sampling protocols
- Focus group formed additional questions for experts

Materials Handling and Transportation

- EPA required Doe Run to improve these operations to prevent tracking and spilling of lead bearing materials onto streets.
- Improvements seen, but street concentrations of lead remain too high.
- Doe Run ordered to take additional actions



Air Monitoring Results

- Historic air data shows quarterly average ambient air concentration as high as 11.6 ug/m³ (1st quarter 1998)
- Data shows that the area met the ambient air standard for lead, (1.5 ug/m³), for the last two quarters of 2002.

CHILD BLOOD LEAD MONITORING

- 28% OF CHILDREN LESS THAN 6 YEARS OLD EXCEEDED 10 MG/DL AT BEGINNING OF PROJECT
- HIGH PERCENTAGES CLOSER TO FACILITY
- MOST RECENT MONITORING SHOWS 14% EXCEEDANCE
- MANY FACTORS MAYBE CONTRIBUTING

Other Site Issues

- 24-acre slag pile in wetland
- Vacant housing
- Groundwater
- Ecological Impacts
- Sulfur dioxide releases
- Access refusals

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